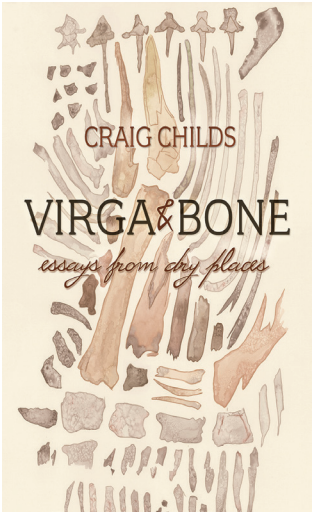
Virga & Bone STEM

STUDENT ACTIVITY

Animal Adaptations

SUPPLIES

- Desert Animal Adaptations Sheet
- Paper
- Drawing Supplies



VOCABULARY

- **Adaptation -** a trait that makes an organism better suited to its environment
- **Environment -** the living and nonliving things surrounding an animal
- **Physical Adaptation -** a physical trait that an animals has to help it survive
- **Behavioral Adaptation -** a behavior that help animals survive

OBJECTIVES

- Students will have a greater understanding of how animals, including humans, adapt to their environments.
- Students will have a greater understanding of the differences between physical and behavioral adaptations.
- Students will enjoy applying their knowledge of adaptations to create something new.

INTRODUCTION

1. An **adaptation** is a trait that makes an organism better suited to its **environment.** There are two kinds of adaptations - **physical adaptations,** which are physical traits developed over time, and **behavioral adaptations** which are things that an organism does in order to survive.

2. Explore the animals listed on the Desert Animal Adaptations Sheet. What advantages do those animals have that help them survive in the desert? Write down or draw your observations.

3. There are two types of **adaptations: physical adaptations** are physical traits that animals have that help them to survive, such as camouflage to help it hide from predators. **Behavioral adaptations** are things that animals do, such as the Ringneck Snake “playing dead” when threatened. Are the adaptations you’ve written down physical or behavioral?

ACTIVITY

1. Design an animal that is adapted to living in the Utah desert! Start with one of the following types of animals:

a. Mammal
b. Bird
c. Reptile
d. Amphibian

2. Draw the first draft of your animal! It can look as much or as little like a real animal as you would like. You're going to be adding lots of adaptations to your drawing, so be sure that you leave plenty of room!

3. Next, start giving your animal **physical adaptations**. Start by asking yourself questions about your animal.

a. Where does it find shelter?
b. How does it find food in the sparse desert landscape? What does it eat?
c. How does it stay hydrated? How often does it need water, and where does it find the water?
d. How does it stay cool enough to survive?
e. Does it have any predators? If so, how does it protect itself from them?

4. Draw your animal's **physical adaptations.** You can add them on to your first drawing, or start a new one!

5. Now, start giving your animal **behavioral adaptations**. Ask yourself what your animal does in order to survive in the desert. Is it awake during the day or during the night? How does it hunt or forage? Does it run away from predators, or hide from them?

6. Once you've finished designing your animal, give it a name! Scientists usually name animals based on what kind of animal it is, and sometimes they're really silly, like the species of fungus named "spongiforma squarepantsii", after Spongebob Squarepants! You're the scientist and you can name your animal whatever you want!

CONCLUSION

1. Compare your new animal with real-life desert animals. How different was it?
What things does it have in common?

2. What kinds of adaptations do humans have that help them survive in extreme climates?
What are some things you should do - behavioral adaptations - to stay safe if you're in the desert?